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10/679,235	10/03/2003	Stephane F. Rouanet	03031	3544

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EXAMINER	
HUYNH, KHOA D	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

mr

Office Action Summary	**Application No.** 10/679,235	**Applicant(s)** ROUANET ET AL.
	Examiner Khoa D. Huynh	**Art Unit** 3751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,10-16 and 54-70* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,10-16 and 54-70* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date *10/26/07*.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 3, 4-7, 10, 11, 63-65 and 68-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rinchart (6708734) in view of Kunert (5092101), Niijima et al. (JP 08268534) and Rocchio et al. (20040003866).

The Rinchart reference discloses an apparatus for filling a particulate material, i.e. silica gel (col. 2, line 60) from a supply container (105) into a vessel or panel. Even though the Rinchart reference does not specifically disclose that the panel includes first and second sheets and supporting members as claimed, attention, however, is directed to the Kunert reference which discloses a panel for receiving a layer (3) consisting of a filler of silica aerogel particles. The panels includes a first sheet (1), a second sheet (2) and two or more supporting members (8) disposed between the sheets, wherein the supporting members defining one or more channels disposed between the first and second sheets and the channels having an internal volume. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the Rinchart reference by employing a vessel or panel having first and second sheets and supporting members as a receptacle for holding a silica gel power in view of the teaching of Kunert. Such modification would be considered a simple substitution of one known receptacle for another in the power filling art to obtain a predictable result that is a window having an insulating layer. *KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1742, 82 USPQ 2d 1385, 1396 (2007).*

Also, as schematically shown in Figure 1, the vessel or panel is subject to a vibratory motion, via an actuator (at 30), as the internal volume of the vessel or panel in being filled with the particulate material to the desire amount. Even though the Rocchio et al. reference remains silent regarding static electricity being produced, it, however, would have been obvious to one of ordinary skill in the art to recognize *that particulate matter does produce electrostatically chargeable particles* since it is a general knowledge in the powder filling art that particulate material or matter is normally charged with or agglomerated due to large amount of the static electricity generated during filling and by the vibration device.

The Rinchart reference also DIFFERS in that it does not specifically disclose that at least a portion of static electricity is discharged as claimed. Attention, however, is directed to the Niijima et al. reference which discloses a power supply device. The device includes a vibration device (2) to excite the power (7) inside the container (at 3). The Niijima et al. reference also discloses that the gutter part (4) is treated (e.g. humidified air) prior to filling to discharge or eliminate the static electricity generated by the vibration device (2). Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to have modified the Rinchart device by injecting humidified air into the powder, in view of the teaching of Niijima et al., in order to enhance the densification of the particles by preventing them from agglomerating due to large amount of static electricity.

Regarding claims 1 and 10, the method as claimed would be inherent during the normal use and operation of the modified Rinchart device.

Regarding claims 3 and 4, even though the modified Rinchart reference does not specifically include a tamping device as claimed, attention, however, is directed to the Rocchio et al. reference which discloses *another powder filling device* having a vibration mechanism (at 225) and, as schematically shown in Figure 5B or 5C, a tamping device (at 240 or 250) along the length of the vessel by impacting a portion of the vessel through a stationary surface (at 130). Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to have modified the Rinchart device by employing a tamping device, in view of the teaching of Rocchio et al., in order to compact the powder inside the receptacle to prevent air spaces due to loose filling. The method as claimed would be inherent during the normal use and operation of the modified Rinchart device.

Regarding claim 5, the modified Rinchart reference DIFFERS in that it does not specifically indicate tamping motion subjects to at least one deceleration of at least about 900 m/s^2 as claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ such deceleration for the tamping motion since discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).*

Regarding claim 6, the modified Rinchart reference also discloses that the vessel or panel is simultaneously subjected to the tamping motion and the vibratory motion (page 4, left column, lines 7-12 of Rocchio et al.). The method as claimed would be inherent during the normal use and operation of the modified Rinchart device.

Regarding claim 7, the modified Rinchart reference also discloses that the vibratory motion is ceased before the vessel or panel is subjected to the tamping motion (page 4, left column, lines 7-12 of Rocchio et al.). The method as claimed would be inherent during the normal use and operation of the modified Rinchart device.

Regarding claim 11, the modified Rinchart. reference DIFFERS in that it does not specifically indicate the relative humidity of about 80% or more as claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ such percentage of relative humidity for the humidified air since discovering an optimum value for humidified air of a result effective variable involves only routine skill in the art. *In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).*

Regarding claims 63 and 64, Even though the modified Rinchart reference does not specifically discloses that the sheets are thermoplastic sheets comprising a thermoplastic resin as claimed, it, however, would have been obvious to one of ordinary skill in the art to have modified the modified Rinchart reference by employing thermoplastic resin for the sheets. Such modification would be considered a mere choice of a preferred material for a panel on the basis of its suitability for the intended use.

Claims 68-70 recites limitations that are substantially similar to the limitations recited in the above claims which have been rejected as discussed supra.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Rinchart (as discussed supra) in view of Krush et al. (6250792).

The modified Rinchart reference DIFFERS in that it does not specifically disclose that the vibratory motion is a sinusoidal motion as claimed. Attention, however, is directed to the Krush et al. reference which discloses a vibration device (10) used in powders filling/dispensing apparatus (col. 1, lines 12-25; col. 5, line 15) is known. The vibration device produces sinusoidal vibration or motion to transfer forces and impact impulses to the container wall to promote free flow of powder material. Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to have modified the modified Rinchart device by employing a sinusoidal vibration or motion, in view of the teaching of Krush et al., in order to disturb the powder in the container to promote free flow of powder. The method as claimed would be inherent during the normal use and operation of the modified Rinchart device.

4. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Rinchart (as discussed supra) in view of Sato et al. (US 2004/0134560).

The modified Rinchart reference DIFFERS in that it does not specifically disclose the use of a corona discharge to reduce the amount of static electricity as claimed. Attention, however, is directed to the Sato et al. reference which discloses a power supply device. The device includes a corona charging device (29) to ionize air for purpose of delivering ions to surfaces to be charged. Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to have modified the Rinchart device by employing a corona charging device, in view of the teaching of Sato et al., in order to apply a uniform charge of positive polarity across the entire surface of the receptacle. The method as claimed would be inherent during the normal use and operation of the modified Rinchart device.

5. Claims 14-16, 54-62 and 66-67, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over modified Rinchart (as discussed above).

Even though the Rinchart reference does not specifically discloses that the panel is a glazing panel as claimed, it, however, would have been obvious to one of ordinary skill in the art to recognize that the Rinchart panel could be construed as a double glazing window especially since the Rinchart reference also discloses that the present invention relates to a wall or a window.

The modified Rinchart reference also DIFFERS in that it does not used to fill powder comprising metal oxide aerogel particles as claimed. It, however, would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the modified Rinchart device to fill powder containing metal oxide aerogel particles. Such modification would considered a mere choice of a preferred filling material on the basis of its suitability for the intended use especially since Rinchart also discloses that the particulate material could be various forms of carbon and APS silica gel (col. 2, lines 59-60).

Even though the modified Rinchart reference does not specifically discloses that the sheets are thermoplastic sheets comprising a thermoplastic resin as claimed, it, however, would have been obvious to one of ordinary skill in the art to have modified the modified Rinchart reference by employing thermoplastic resin for the sheets. Such modification would be considered a mere choice of a preferred material for a panel on the basis of its suitability for the intended use.

Regarding claims 14-16, 54-62 and 66-67, the method as claimed would be inherent during the normal use and operation of the modified Rinchart device.

Response to Amendment

6. Applicant's amendment, filed on 10/26/07, to the pending claims is insufficient to distinguish the claimed invention from the cited prior art or overcome the rejections as discussed above.

Response to Arguments

7. Applicant's arguments filed on 10/26/07 with respect to the pending claims have been fully considered. However, such arguments are deemed not persuasive.

Applicant asserts that the Rocchio et al. reference does not teach a method for filling a panel as claimed in amended claims. See the Remarks section. Applicant also asserts that there is no suggestion to combine the teachings of Rocchio et al. and Niijima et al. to arrive at applicant's claimed invention. See remarks section. However, applicant's arguments with respect to amended pending claims and new claims have been considered but are moot in view of the new grounds of rejections as discussed supra.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khoa D. Huynh whose telephone number is (571) 272-4888. The examiner can normally be reached on M-F (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Khoa D. Huynh
Primary Examiner
Art Unit 3751

HK